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Gauvin et al.

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[54] **METHOD AND APPARATUS FOR
 MODIFYING COPIES OF REMOTELY
 STORED DOCUMENTS USING A WEB
 BROWSER**

[75] **Inventors:** William Joseph Gauvin, Leominster;
 Harold Jones, Northboro; Edward
 James Taranto, Boston, all of Mass.

[73] **Assignee:** Digital Equipment Corporation,
 Maynard, Mass.

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[52] **U.S. Cl.** 707/10; 707/501; 707/513;
 395/200.47; 395/200.48

[58] **Field of Search** 707/10, 501, 513,
 707/104, 1-3; 395/200.47, 200.48, 200.54,
 200.57, 200.3, 200.32, 200.33, 200.49

[56] **References Cited**

U.S. PATENT DOCUMENTS

5,721,851	2/1998	Cline et al. .	
5,732,219	3/1998	Blumer et al.	395/200.57
5,754,774	5/1998	Bittinger et al.	395/200.33
5,764,906	11/1995	Edelstein et al.	395/200.49
5,774,670	6/1998	Montulli .	
5,781,909	2/1996	Logan et al.	707/200
5,784,564	5/1996	Camaisa et al. .	
5,826,242	10/1998	Montulli .	

5,841,978 11/1998 Rhoads .

OTHER PUBLICATIONS

Morris, Mary, "HTML for Fun and Profit", SunsoftPress, pp. 91-95, 1995.

"Web Server Image Maps, Dialog Link", Technology Tutorial File 275/02015705 Dec.19, 96.

"TeleWeb: Loosely Connected Access to the World Wide Web," Schilit et al., Computer Networks and ISDN Systems, vol. 28, No. 11, pp. 1431-1444, May 1996.

"A Distributed Web Server and its Performance Analysis on Multiple Platforms," Yew-Huey Liu et al., Proceedings of the 16th International Conference on Distributed Computing Systems, IEEE Computer Society Press, pp. 665-672, May 1996.

Primary Examiner—Thomas G. Black

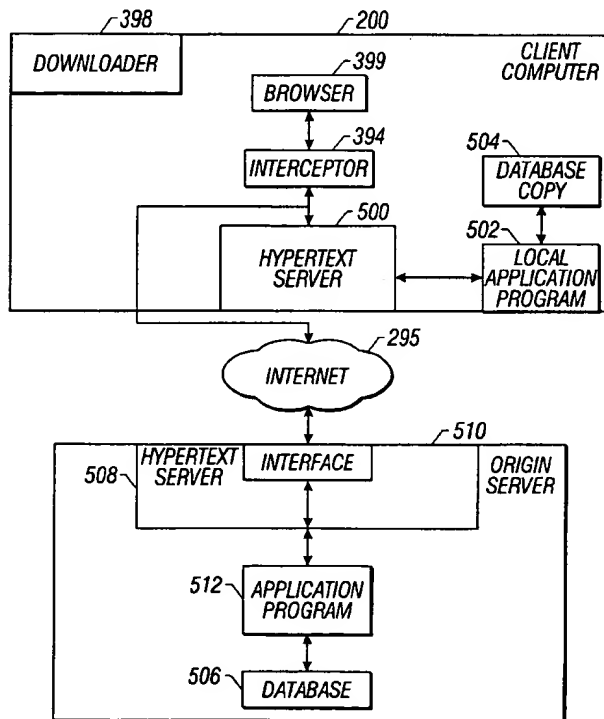
Assistant Examiner—Hosain T. Alam

Attorney, Agent, or Firm—Williams, Morgan & Amerson, P.C.

[57] **ABSTRACT**

A local client computer includes a local hypertext server, a local application program, and a downloader for downloading a copy of a remote network document (local copy), that is accessible by the local application program, onto the client computer. When connected to the network, a downloader is executed to create the local copy on the client. When disconnected, the local copy may be accessed and modified through the client browser in a manner that is similar to when the client is connected to the network.

28 Claims, 17 Drawing Sheets



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TITLE: Method and apparatus for modifying copies of remotely stored documents using a web browser

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Detailed Description Text - DETX (14):

Accordingly, during disconnect, requests from the browser 399 to modify the database are intercepted by the interceptor 394. Such request may include data from a template. The interceptor 394 responsively determines that the client computer 200 is disconnected from the network, and then directs the request to the local hypertext server. The local hypertext server responsively translates the request and transfers the data (from the template) to the local application program 502 to modify the locally stored database copy. This process is done completely while disconnected from the network 295 and thus, does not require access to the hypertext server on the origin server 510. Moreover, this process is a background process and thus, does not interrupt the execution of the browser or other application programs on the system. The modifications to the database copy 504 then may be made to the database 506 on the origin server 510 upon reconnect.

Detailed Description Text - DETX (68):

A process for creating the local image mapping table is shown in FIG. 12. This process may be initiated by the interceptor 394 either while browsing remote network sites, or when the CFHD button 400 is selected. Similar to the CFHD process, the preferred process of creating the local image mapping table is a background process and thus, does not interrupt the normal execution of the browser 399.